ABSTRACT OF THE DISCLOSURE

An audio-signal-processing apparatus includes a band-decomposition unit utilizing a band-decomposition characteristic based on the harmonic-tone composition of musical instruments. A low interval limit generates the harmonic-tone to each band signal after decomposing the bass signal into a plurality of band signals. The audio-signal processing apparatus generates a harmonic-tone individually for each pure tone component, which includes complex tones and suppresses deterioration of the sound quality.